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INTRODUCTION.

This REVIEW is based on reports for April, 1892, from 2,911 regular and voluntary observers. These reports are classified as follows: 158 reports from Weather Bureau stations; 47 reports from United States Army post surgeons; 1,902 monthly reports from state weather service and voluntary observers; 31 reports from Canadian stations; 219 reports through the Cen-

tral Pacific Railway Company; 554 marine reports through the co-operation of the Hydrographic Office, Navy Department; marine reports through the "New York Herald Weather Service;" monthly reports from local weather services established in all states and territories, except Idaho; and international simultaneous observations. Trustworthy newspaper extracts and special reports have also been used.

CHARACTERISTICS OF THE WEATHER FOR APRIL, 1892.

Cool and wet weather delayed farming operations in the Pacific coast states, the Dakotas, Nebraska, parts of Kansas and Indian Territory, and in Minnesota, Iowa, Missouri, and Louisiana. In Florida, southern and western Texas, parts of New Mexico and Oklahoma Territory, and from eastern New York over central and northern New England the month was unusually warm and dry. In Florida small fruits and oranges were injured by drought. Crops were seriously affected by drought in Texas. Owing to a scarcity of water and grass a great loss of live stock occurred on the ranges of southern and western Texas and New Mexico.

TEMPERATURE.

The temperature was lower than usual, except in Florida, Texas, the eastern lake region, and New England. The most marked departure below the normal was noted from the middle and north Pacific coasts to the Dakotas, where it was 4° to 6°. On the 10th and 11th frost injured fruit and tender vegetation from Tennessee to the Carolina coast, and on the 16th frost was destructive to vegetation in the Carolinas and Georgia.

PRECIPITATION.

The monthly precipitation was in excess of the average amount for April in the central valleys and along the north Pacific coast, and was deficient in New England and southeastern and southwestern districts. In the first decade of the month heavy snow fell from Colorado and Wyoming to Iowa, the snowfall being notably heavy in the Black Hills region of South Dakota and Wyoming, where a great loss of live stock was reported.

STORMS.

Destructive local storms were noted on five to seven dates from Texas to Kansas and Illinois. Unusually severe wind and local storms occurred on the 1st from the middle and southeast slopes of the Rocky Mountains to the western lake

region; a tornado was reported in Harvey county, Kans.; and six persons were killed in Chicago, Ill. Tornadoes occurred in Oklahoma, Kansas, and Missouri on the 3d; in Arkansas and Illinois on the 4th; in New York on the 5th; and in Arkansas and Louisiana on the 20th.

FLOODS.

In the early part of the month streams in the lower Ohio valley, Tennessee, Mississippi, Alabama, and New York rose rapidly. Floods in the Tennessee River and tributaries caused great damage in Tennessee and northern Alabama. The Yal-labusha River was reported the highest ever known at Grenada, Miss. High water caused great damage in northern Mississippi. Large areas were submerged in Alabama by the overflow of the Coosa River. In east-central Mississippi great destruction to life and property resulted from the overflow of the Tombigbee River and tributaries. The Red River of the North overflowed its banks at Saint Vincent, Minn., on the 10th. On the 6th the Mississippi River reached the danger-line at Cairo, Ill. On the 14th the danger-line was reached at Memphis, Tenn., and Vicksburg, Miss. At New Orleans, La., the danger-line was reached on the 5th. At the close of the month the Mississippi River was above the danger-line from Cairo to the Gulf. The river was falling slowly at Cairo, and rising south of Memphis. No important breaks had occurred in the levees.

AUROSAS.

The more notable auroral displays of the month were noted from New England to Michigan on the 23d; from Maine to Washington, and in the Ohio valley, on the 25th; from Maine to Montana, and from the Ohio valley to the middle slope of the Rocky Mountains, on the 26th; and at scattered points from Maine to Washington on the 30th.

ATMOSPHERIC PRESSURE (expressed in inches and hundredths).

The distribution of mean atmospheric pressure for April, 1892, as determined from observations taken daily at 8 a. m. and 8 p. m. (75th meridian time), is shown on Chart II by isobars.

In April the mean pressure is usually highest on the Pacific coast between the 37th and 46th parallels, where it is above 30.05, and it is above 30.00 from Manitoba to the Lake Superior region and over districts east of the Mississippi and south of the

Ohio rivers. The mean pressure is usually lowest over the Gulf of Saint Lawrence, where it is below 29.90, and it is below 29.95 on the southeast slope of the Rocky Mountains, over the west part of the southern plateau region, and in the British Possessions north of Montana and Washington. There is usually a decrease of pressure, except along the north Pacific coast, and over Maine and the Canadian Maritime Provinces, where the normal pressure is slightly higher than for March. In the United States the most marked decrease of pressure usually occurs in the middle Missouri valley and on the northeast slope of the Rocky Mountains, where it is more than .10. In British America west of Hudson Bay the decrease of pressure probably exceeds .20.

In April, 1892, the mean pressure was highest along the south Atlantic coast, where it was above 30.15, and it was above 30.10 in Manitoba and along the middle Pacific coast. The mean pressure was lowest over the Gulf of Saint Lawrence, where it was below 29.80, and it was below 29.90 over the west part of the southern plateau region.

A comparison of the pressure chart for April, 1892, with that of the preceding month shows a decrease of pressure save in the Atlantic and east Gulf states, along the Pacific coast, and over the west parts of the middle and northern plateau regions. The most marked decrease of pressure was noted over Kansas and eastern Nebraska, where it was more than .15, and the greatest increase occurred at stations on the New England and North Carolina coasts and in the Sacramento Valley, California, where it was .10.

The mean pressure was above the normal except over the Canadian Maritime Provinces, on the north Pacific coast, and in an area extending from South Dakota and Wyoming to Texas and the southern plateau region. The most marked departure below the normal pressure was reported at Gulf of Saint Lawrence stations, where it was more than .05, and the greatest departure above the normal pressure was noted on the North Carolina coast, where it exceeded .15.

HIGH AND LOW AREAS.

The paths of areas of high and low pressure over the United States and Canada during April, 1892, are shown on Charts IV and I, respectively, and some of the prominent characteristics of the areas are given in the table at the end of this chapter.

HIGH AREAS.

Six high areas appeared, the average number traced for April during the last 17 years being 8. Of the high areas traced 5 advanced from the Pacific coast, of which number 2 traversed the continent and last appeared off the south Atlantic coast, 1 disappeared in the Hudson Bay region, 1 over the middle plateau region, and 1 over the Ohio Valley. One high area advanced from the British Northwest Territory and disappeared off the middle Atlantic coast. The Pacific coast high areas appeared to move northward off the coast, and passed eastward over the Saskatchewan Valley, thence southeastward over the central valleys, where, with one exception, they recurved northeastward to the Lake region, and moved thence southeastward toward Bermuda. The average velocity of the high areas, 23 miles per hour, was somewhat less than the average rate of advance of high areas for April. The following is a description of the high areas traced:

I and II.—Number I appeared on the Oregon coast the morning of the 4th, with pressure above 30.30, and moved southeastward over the middle plateau region by the 5th, with pressure above 30.40. During the 6th this high area apparently shifted position to the westward, and, moving northward over the Pacific coast states, appeared in Alberta the morning of the 7th as number II. The morning of the 4th the temperature was generally low from the Rocky Mountains to the Pacific coast; freezing weather prevailed over the middle and northern plateau regions and in the Northwest; and heavy frost was noted at Eureka, Cal. The morning of the 5th the temperature had fallen more than 20° in the lower Missouri valley, and heavy frost occurred in western Kansas.

Number II advanced from Alberta to Nebraska during the 7th and 8th, with pressure above 30.60 the morning of the 8th, passed northward over the valley of the Red River of the North during the 9th, and moving thence slowly eastward remained nearly stationary north of Lake Superior until the 13th, when it apparently shifted position westward and united with number III.

On the 7th the temperature fell more than 20° in the Northwest. During the 8th the cool wave extended over the middle Mississippi and Ohio valleys, and reached the Gulf and south Atlantic states on the 9th, with heavy frost in parts of western Kansas, Oklahoma Territory, and western North Carolina. On the 10th the temperature fell below freezing in parts of Tennessee, and heavy frost was reported thence to Virginia, the Carolinas, and northern Georgia. The weather continued unusually cold east of the Rocky Mountains during the 11th, the temperature being 10° to 15° below the normal over a great part of that region, and heavy frost occurred in North Carolina and Virginia.

III.—Apparently moved northward off the Pacific coast and the evening of the 11th was central on the Washington coast, with pressure above 30.20. Advancing to Alberta during the 11th, the high area reached the Red River of the North Valley on the 13th, passed thence southward to the Gulf of Mexico by the 15th, and thence off the south Atlantic coast during the 16th, with highest pressure, 30.48, over Nebraska at the morning report of the 14th. On that date the temperature was below freezing on the eastern slope of the Rocky Mountains north of Texas, and the temperature fell 10° to 20° from Texas to Pennsylvania. On the 15th the temperature fell 20° from Alabama to North Carolina, and on the 16th frost injured tender vegetation in the middle and east Gulf and south Atlantic states.

IV.—Apparently moved northward off the Pacific coast, and the evening of the 17th was central off the Oregon coast with pressure above 30.20. Passing slowly northward along the north Pacific coast during the 18th and 19th, the area moved thence to the region north of Montana by the morning of the 20th, with pressure above 30.60, thence southeastward to Arkansas by the 23d, and during the 24th moved northward over the Ohio Valley and apparently united with high area V.

On the 18th frost nipped vines near Fresno City, Cal. A decided fall in temperature occurred on the middle-eastern and northeast slopes of the Rocky Mountains, the 12-hour temperature fall being more than 20° on the middle-eastern slope. On the 19th freezing weather was reported at Olympia, Wash., and heavy frost damaged fruit in that section. On the 21st the temperature fell below freezing in parts of western Kansas, and heavy frost injured fruit and tender vegetation about Dodge City, Kans.

V.—Appeared over Manitoba the morning of the 23d, with pressure above 30.30, passed thence slowly eastward to the region north of Lake Superior, where it remained nearly stationary until the 26th, with pressure rising above 30.60, after which it moved southeastward off the middle Atlantic coast during the 27th, attended prior to the 26th by a moderate cold wave over the middle Atlantic and New England states.

VI.—Appeared off the middle Pacific coast the morning of the 26th was central off the north California coast, with pressure above 30.20. By the 27th the center had advanced to the region north of Montana, with pressure above 30.40, and passed thence to the lower Missouri valley by the morning of the 29th, to the Lake Superior region during the 29th, and to a position off the North Carolina coast by the close of the month, with pressure 30.50 at Port Huron, Mich., at the evening report of the 30th. This high area was attended by a severe cold wave in the Northwest, the lowest temperature for the season ever recorded at Fort Assinaboine, Mont., 12 years' record, being noted the morning of the 18th, when it fell to 20°. This cold wave was not severely felt in the central valleys and the Atlantic coast states.

LOW AREAS.

The average velocity of low areas for April is 26 miles per hour, 11 miles per hour less than the average velocity of winter low areas. A principal track of April low areas is from Wyoming almost due eastward to New England and south of Nova Scotia, and thence east-northeast over the Grand Banks, and less frequented tracks are traced from the Saskatchewan Valley to the Lake region, and from the southern plateau region and the south Atlantic coast. An average of one low area per month advances from the Pacific coast and traverses the continent in April.

Eight low areas appeared in April, 1892, the average number traced for the corresponding month of the last 19 years being 10. Of the low areas traced for the current month 5 advanced from the Pacific coast north of the 45th parallel, one first appeared in the upper Saskatchewan valley, one, a continuation of low area XIII for March, occupied Nebraska at the opening of the month, and one advanced from the west part of the Gulf of Mexico. The low areas from the Pacific moved southeast over the central valleys, and thence northeastward, and 4 of the low areas traversed the continent. The low area from the Saskatchewan Valley disappeared in the Hudson Bay region. Low area I, a continuation of number XIII for March, and the low area from the Gulf of Mexico advanced to the Gulf of Saint Lawrence. The following is a description of the low areas traced:

I.—Was a continuation of low area XIII for March, 1892, and at the morning report of the 1st occupied Nebraska, with pressure 29.00, a decrease of central pressure of .20 to .30 in 12 hours. At this time the barometric gradient was very marked to the westward of the center, being .60 inch in less than 200 statute miles; to the eastward the gradient was somewhat less marked. During the period 8 a. m. to 8 p. m. of the 1st the pressure decreased .40 to .50 inch over the west Lake Superior region, and the center moved in that direction, reaching the region north of Lake Superior on the 2d, and passed thence rapidly eastward to the Gulf of Saint Lawrence by the 3d, with a marked loss of energy after the 1st.

On the 1st this low area was attended by heavy gales and destructive local storms from Nebraska, Kansas, and Texas to the upper Mississippi valley. The conditions which attended the development of tornadoes and thunderstorms from Nebraska to Texas the night of March 31st extended over the middle Mississippi, lower Missouri, and lower Ohio valleys. Wind velocities of 50 to 70 miles per hour and destructive thunderstorms were reported from Texas to Iowa, and tornadoes occurred in Kansas and Illinois.

On the 2d heavy southwest winds prevailed over the south-central and southwestern lake region, a velocity of 57 miles per hour being noted at Port Huron, Mich., and 54 miles per hour was reached at Detroit, Mich., and Chicago, Ill. The afternoon and evening of the 3d destructive thunder and hail storms occurred in West Virginia and southwestern Pennsylvania. Owing to the marked barometric gradient the rain area extended less than 600 miles east of the storm center during the 1st. On the 2d the gradient was less marked and the rain area extended to the Atlantic coast.

II.—On the 1st the pressure was low on the north Pacific coast and during the 2d this low area advanced to the region north of western Montana, with pressure below 29.50, rain in the Pacific coast states, and snow over the west part of the middle plateau region. During the 3d the center moved to Kansas, with pressure below 29.30, rain generally from the Rocky Mountains over the Ohio Valley and the southern Lake region, and high winds and severe local storms from Texas and Kansas to western Pennsylvania. Storms with tornadic features occurred in Texas, Oklahoma Territory, Kansas, and Missouri. A further increase of energy was shown the morning of the 4th, when the pressure was below 29.10 in central Nebraska. On this date the rain area reached the New Jersey and south New England coasts, destructive storms occurred in Arkansas, Kansas, Nebraska, Missouri, Tennessee, Kentucky,

Illinois, Ohio, Wisconsin, Michigan, and tornadoes were noted in Arkansas, Tennessee, and Illinois. Passing northeast, with a slight loss of energy, the center reached the region east of Lake Superior on the 5th. Destructive storms occurred from Tennessee to New York; tornadoes were reported in Illinois and New York, and unusually hard south to west gales prevailed over the southern Lake region. During the 6th the storm moved to the Gulf of Saint Lawrence.

III.—Appeared north of Alberta the evening of the 4th, and the evening of the 5th was central in Saskatchewan, with pressure below 29.50. During the 6th the center moved south of east over Manitoba, and during the 7th passed north of the Lake region and probably united with low area II which occupied the Gulf of Saint Lawrence. On the 5th rain fell in Washington and Oregon, and high southwest winds prevailed over Montana. On the 6th rain fell from the north Pacific coast to the Dakotas. On the 7th the rain area extended over the northern Lake region.

IV.—Appeared near the mouth of the Rio Grande River on the 5th, and the morning of the 6th was central off Corpus Christi, Tex. By the evening of the 6th the center had reached northwestern Louisiana, with pressure below 29.90, it moved thence eastward over the north part of the Gulf States during the 7th, with pressure below 29.70, passed off the North Carolina coast and reached eastern Maine during the 8th, with pressure below 29.60 at the evening report, remained nearly stationary over eastern New England during the 9th, with pressure falling below 29.30 at the evening report, and passed thence northeastward over the Gulf of Saint Lawrence during the 10th, with pressure 29.16 at Anticosti Island at 8 p. m.

During the 5th rain set in on the middle Gulf coast, and on the 6th rain was general in the Gulf States, except in southern Texas and Florida. On the 7th the rain area extended to the Atlantic coast south of the 40th parallel, heavy rain, thunder, and hail storms occurred in Tennessee, and high southerly winds prevailed on the south Atlantic coast. On the 8th the rain area extended over the middle Atlantic states. At Wilmington, N. C., and Charleston S. C., high winds were reported from the southwest, and at Hatteras and Kitty Hawk a velocity of 46 miles per hour from the north was reported. On the 9th the rain area extended from the Lake region over the middle Atlantic and New England states, and brisk to high northwest winds were reported at coast stations from South Carolina to south New England. On the 10th rain fell from the Lake region over Pennsylvania, New York, and New England, with high west to northwest winds on the New England coast.

V.—Appeared on the Pacific coast north of Washington the morning of the 9th and the evening of that date was central over Alberta, with pressure below 29.60. Moving slowly eastward over Assinaboia by the morning of the 11th, the center passed thence southward to extreme northwestern Texas by the evening of the 12th, thence northeastward to the lower Missouri Valley during the 13th, and to the Virginia coast during the 14th, with pressure below 29.60 at the evening report of the 14th. During the 15th the center advanced northeastward and united with an area of low pressure which occupied the Gulf of Saint Lawrence.

On the 9th rain fell in Oregon and Washington and thence over Montana, the temperature rose 10° to 20° on the eastern slope of the Rocky Mountains, and the wind reached a velocity of 50 miles per hour from the south at Fort Canby, Wash. On the 10th the rain area extended over the lower Missouri valley, a subsidiary development appeared over western Texas, the wind attained a velocity of 54 miles per hour from the north at Amarillo, Tex., and destructive hailstorms were reported in central and northeastern Texas. During the 11th and 12th high area II occupied the Lake region, and this low area was deflected southward.

On the 11th the rain area extended from the Missouri Valley to the south Atlantic coast, and on the 12th was confined to the western-central valleys. On the latter-named date high

wind and rain or snow prevailed over western Minnesota, the Dakotas, and Iowa. On the 13th heavy wind, rain, and snow storms prevailed in the West and Northwest, and severe local storms were reported in Texas and Louisiana. On the 14th rain fell from the middle Mississippi valley to the Atlantic coast south of Massachusetts, high winds prevailed on the Lakes and along the south Atlantic coast, heavy thunder and hail storms occurred from Georgia to Virginia, and rain changed to snow in New Jersey and New York. During the 15th the rain area passed off the Atlantic coast, and high northeast, changing to southerly, winds prevailed on the New England coast.

VI.—Appeared off the north Pacific coast the morning of the 14th, and advanced to Alberta by the evening report of that date, with pressure below 29.50. Moving southeastward the center reached the west Gulf states on the 20th, passed thence to the Lake region by the 21st, and thence to the region north of the Gulf of Saint Lawrence by the 23d. On the 14th high winds prevailed on the north Pacific coast, reaching a velocity of 82 miles per hour from the south at Fort Canby, Wash., rain fell on the middle and north Pacific coasts, and the temperature rose 10° to 20° from Oregon to the northeast slope of the Rocky Mountains. On the 16th rain fell in the middle Mississippi and lower Missouri valleys. On the 17th the rain area extended over the Ohio Valley and Pennsylvania, severe thunder and hail storms occurred in Arkansas and western Missouri, and heavy snow was reported in extreme western Nebraska.

On the 18th rain fell from the middle-eastern slope of the Rocky Mountains to the middle Atlantic coast, severe thunder, rain, and hail storms occurred from northeastern Texas to Illinois, and heavy snow was reported in eastern Colorado. On the 19th severe thunderstorms occurred in Texas, Oklahoma Territory, Kansas, Tennessee, and Georgia. On the 20th heavy rain fell in Mississippi, Louisiana, and Arkansas, destructive local storms occurred in Kansas, Arkansas, Texas, and Louisiana, and tornadoes were reported in Arkansas and Louisiana. On

the 21st heavy rain and local storms occurred in southern Louisiana and along the middle Gulf coast, and the wind reached a velocity of 60 miles per hour from the southeast at Lexington, Ky. After the 21st this low area lost strength, and during the 23d the rain area passed off the New England and middle Atlantic coasts.

VII.—Was central on the north Pacific coast the morning of the 24th, with pressure below 29.40, passed thence to the region north of Montana by the morning of the 25th, thence to Colorado by the 26th, thence to the region east of Manitoba by the 27th, with pressure below 29.40, to the Saint Lawrence Valley by the 28th, and to the Gulf of Saint Lawrence by the 29th. On the 24th heavy gales occurred on the north Pacific coast, the wind reaching a velocity of 72 miles per hour from the southeast at Fort Canby, Wash., and rain fell from the middle and north Pacific coasts over western Montana. On the 25th the rain area extended to the western lake region. On the 26th high wind, with snow, prevailed over Nebraska and the Dakotas. On the 27th severe windstorms occurred from the Dakotas and Nebraska over the western lake region. On the 28th gales prevailed from the Lake region to the Atlantic coast, and heavy rain fell in the Southwest. High winds were noted on the North Carolina coast on the 29th.

VIII.—Appeared off the north Pacific coast on the 28th, and the morning of the 29th was central on the Washington coast, with pressure below 29.80. Passing thence southeast the storm reached Kansas by the close of the month, with pressure below 29.60. On the 28th rain fell on the middle and north Pacific coasts, and east to south gales occurred on the north Pacific coast, the wind reaching a velocity of 68 miles per hour from the south at Fort Canby, Wash. On the 29th the rain area extended over western Montana, and heavy winds were noted from the north Pacific coast to the middle plateau region. On the 30th the rain area extended to the middle Mississippi valley and the western lake region, and severe thunder and rain storms were reported from Nebraska to Illinois.

Tabulated statement showing principal characteristics of areas of high and low pressure.

Barometer.	First observed.			Last observed.			Duration.	Velocity per hour.	Maximum pressure change in 12 hours, maximum temperature change in 24 hours, and maximum wind velocity.											
	Date.	Lat. N.	Long. W.	Lat. N.	Long. W.				Station.	Rise.	Date.	Station.	Fall.	Date.	Station.	Direction.	Miles per hour.	Date.		
High areas.		°	°	°	°		Days.	Miles.		Inch.			°							
I.....	4	44	124	38	114		2.0	16	Portland, Oregon.....	.32	4	Sacramento, Cal.....	19	3	Keeler, Cal.....	n.	26	4		
II.....	7	53	117	50	83		5.5	23	Swift Current, N. W. T....	.56	7	Saint Vincent, Minn.....	24	7	Saint Vincent, Minn.....	nw.	36	8		
III.....	10	47	126	34	82		5.5	30	Pueblo, Colo.....	.46	13	Montrose, Colo.....	30	12	Springfield, Mo.....	nw.	30	14		
IV.....	17	42	126	38	87		6.5	20	Calgary, N. W. T.....	.42	20	Roseburgh, Oregon.....	18	19	Eureka, Cal.....	n.	30	18		
V.....	23	52	97	35	70		5.0	17	Montreal, Quebec.....	.54	24	Qu'Appelle, N. W. T.....	25	23	Chicago, Ill.....	se.	36	25		
VI.....	26	41	127	35	74		4.5	38	Saint Vincent, Minn.....	.72	28	Moorhead, Minn.....	27	27	Atlantic City, N. J.....	nw.	30	30		
Mean.....							4.8	24		.50			24					31		
Low areas.										Fall.			Rise.							
I.....	1	42	100	50	66		2.0	38	Duluth, Minn.....	.46	1	Chicago, Ill.....	20	1	Leavenworth, Kans.....	sw.	66	1		
II.....	2	51	117	47	57		4.0	35	Anticosti Island, G. of S. L.	.50	6	Green Bay, Wis.....	21	4	Amarillo, Tex.....	s.	66	4		
III.....	5	54	105	52	93		1.0	22	Prince Albert, N. W. T....	.42	5	Omaha, Nebr.....	22	6	Fort Assinaboine, Mont..	sw.	52	5		
IV.....	6	28	96	50	61		4.5	28	Charlotte, N. C.....	.34	7	Montgomery, Ala.....	11	7	Hatteras, N. C.....	n.	46	8		
V.....	9	52	115	37	76		5.0	27	Des Moines, Iowa.....	.50	13	Pueblo, Colo.....	21	9	Chicago, Ill.....	n.	65	14		
VI.....	14	47	126	51	63		9.5	25	Hatteras, N. C.....	.50	14	Roseburgh, Oregon.....	22	14	Fort Canby, Wash.....	s.	82	14		
VII.....	24	46	125	46	61		6.0	32	Calgary, N. W. T.....	.56	14	Cincinnati, Ohio.....	22	21do.....	se.	72	24		
VIII.....	29	48	125	39	98		1.5	44	Fort Canby, Wash.....	.58	24	Moorhead, Minn.....	17	27do.....	s.	68	28		
									White River, Ont.....	.46	30	Pueblo, Colo.....	25	29						
Mean.....							4.2	30		.48			20					65		

NORTH ATLANTIC STORMS FOR APRIL, 1892 (pressure in inches and millimeters; wind-force by Beaufort scale).

The paths of storms that appeared over the west part of the north Atlantic Ocean during April, 1892, are shown on Chart I. These paths have been determined from reports of observations by shipmasters received through the co-operation of the Hydrographic Office, Navy Department, and the "New York Herald Weather Service."

In April there is usually an increase of pressure from Bermuda to Greenland and Iceland and in the tropical regions of the Atlantic Ocean; elsewhere the pressure is lower than for March. The principal track of April storms is traced from Nova Scotia eastward to the 40th meridian, where it divides, one branch passing to Iceland and the other to the region west